

# Instructions to Program Weld Nut Sensor

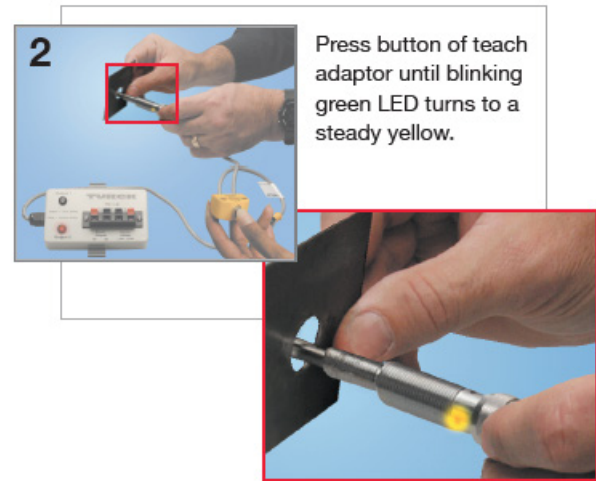
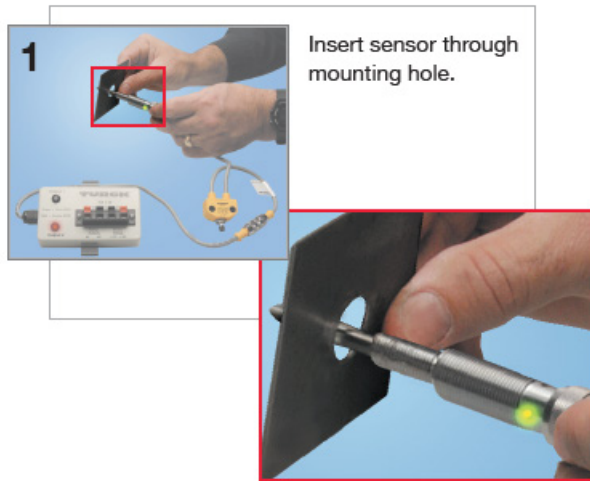
If the protective sleeve/guide pin is being used to mechanically protect the sensor, it must be placed over the probe prior to teaching the sensor. TURCK does not supply the sensor probe protective sleeve/guide. Customers fabricate those parts out of any suitable non-magnetic material. The cushion mount accessory may be used in conjunction with the nut sensor for additional protection from damage.

## PREP

Place the optional teach adapter (VB2-SP1) between sensor and power device.  
Unscrew the protective cap and turn on supply voltage.  
During setup, ensure that the nut will fully cover the scribed line on the sensor probe tip.

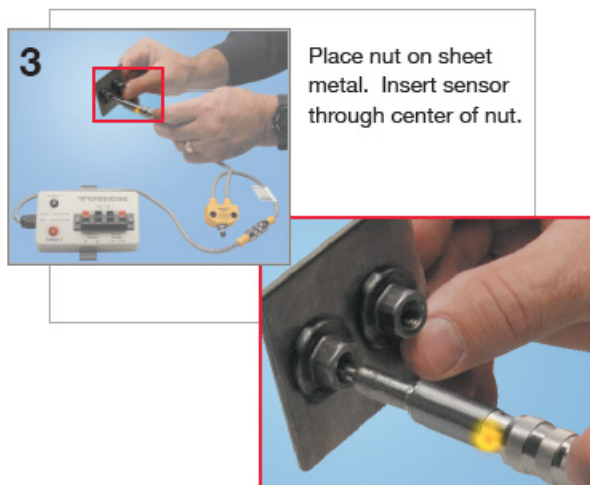
## PART 1

Teach sensor to sense metal without a nut in place.



## PART 2

Teach sensor to detect nut.



## VERIFICATION

- The sensor has been successfully programmed if the yellow LED is illuminated when target is present and the green LED is illuminated when a target is absent.
- There is a 20 second window for completing steps 2 through 4.
- A combination of quick flashing green/yellow indicates measured value error or time-out.
- It is possible to make the sensor normally closed by teaching the nut first and the blank hole second.
- **WARNING:** Presence of magnets may cause sensor to malfunction.